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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/534,511

03/15/2006

Alan H. Winfield

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CANADA

EXAMINER

CAJILIG, CHRISTINE T

ART UNIT

PAPER NUMBER

3633

MAIL DATE

DELIVERY MODE

03/10/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/534,511	Applicant(s) WINFIELD, ALAN H.	
	Examiner CHRISTINE T. CAJILIG	Art Unit 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2008 and 25 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/02/09</u> . | 6) <input checked="" type="checkbox"/> Other: <u>NPL</u> . |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/19/08 has been entered.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 2/02/09 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Examiner Initiated Interview

On 1/16/09, the Examiner conducted an interview with Applicant's representative Edward Yoo to propose an Examiner's amendment that would place the Application in condition for allowance. However, upon submission of an IDS filed on 2/02/09, the indicated allowability of amended claim 1 is withdrawn in view of the newly cited reference(s) to JP 62-105287U published on 7-04-1987 to an unknown inventor. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoneback (U.S. Patent No. 2,276,112) in view of Suzuki, et al. (JP62-105287).

Regarding claim 1, Stoneback in Figures 4-6 discloses a heat insulation window comprising an inner pane (13) and an outer pane (11) defining an air space (14) therebetween and a frame (10) surrounding a perimeter of the window, wherein the frame comprises at least one desiccant concealing member (30) which is hollow and detachable from the frame; a replaceable desiccant cartridge (20) removably disposed within the desiccant concealing member and conduit means (22) for providing gas communication between the air space and the desiccant cartridge; wherein the desiccant concealing member and the desiccant cartridge are positioned adjacent to the inner pane (13), such that the inner pane (13) is between the airspace, and the desiccant concealing member (30) and the desiccant cartridge (20).

Stoneback does not disclose a spacing member disposed between the inner and outer panes which maintain the panes in a spaced-apart relationship, the spacing member being hollow and defining openings permitting gas communication between the air space and the interior volume of the spacing member; a desiccant material contained within the spacing member; and a conduit for providing gas communication

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between the interior volume of the spacing member and the desiccant cartridge; such that air passing into the interior volume of the spacing member first passes through the desiccant cartridge.

Hollow spacing members between two panes of glass are old and well known in the art of windows. Nonetheless, Suzuki et al. discloses a double glazed window assembly with a spacing member (3) disposed between the inner and outer panes which maintain the panes in a spaced-apart relationship, the spacing member being hollow and defining openings (3') permitting gas communication between the air space and the interior volume of the spacing member; a desiccant material contained within the spacing member(See abstract); and a conduit (4) for providing gas communication between the interior volume of the spacing member and a removable desiccant cartridge (5); such that air passing into the interior volume of the spacing member first passes through the desiccant cartridge.

All the claimed elements are known in the prior art and one skilled in the art would have combined the elements as claimed by known methods with no change to their respective functions, and the combination would have yielded predictable results to one having ordinary skill in the art of having two desiccant system, where the second desiccant cartridge acts as a second fill to draw out the excess moisture, while the first desiccant containing spacer acts to reinforce and maintain spacing between the two glass panes.

Regarding claim 2, Stoneback already modified by Suzuki et al. discloses the structure above and further discloses that, the inner pane would be between the spacing member, which is placed between the inner and outer panes, and the desiccant concealing member and desiccant cartridge.

Regarding claim 3, Stoneback already modified by Suzuki et al. discloses the structure above and further discloses that the desiccant cartridge (20) comprises an elongated cylindrical tube (36).

Regarding claim 4, Stoneback already modified by Suzuki et al. discloses the structure above and further discloses that desiccant concealing member (30) is elongated and has a substantially U-shaped cross-sectional profile.

Regarding claim 5, Stoneback already modified by Suzuki et al. discloses the structure above and further discloses that the cross-sectional profile comprises two linear segments (27, 30) joining at a substantially right angle.

Regarding claim 6, Stoneback already modified by Suzuki et al. discloses the structure above and further discloses that the frame (10) comprises an outer channel member (where 11 rests), an inner channel member (28), a web member (a) disposed between the outer and inner channel members, wherein the desiccant concealing member is detachably connected to the inner channel member (via 29).

Regarding claim 7, Stoneback already modified by Suzuki et al. discloses the structure above and further discloses that the desiccant concealing member comprises a first lip (diagonal leg of 29) and a second lip (horizontal leg of 29) which each engage an undercut groove in the inner channel member (28), but does not disclose that the

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desiccant concealing member is comprised of a resilient material. However, it would have been obvious to one having ordinary skill in the art at the time of invention to use a resilient material (such as plastic), since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stoneback in view of Suzuki et al. as applied to claim 1 above, and further in view of Reid, Jr. et al. (U.S. Patent No. 3,151,951).

Regarding claim 8, Stoneback already modified by Suzuki et al. discloses the structure above, and further discloses that a second desiccant material (35) is contained within the desiccant cartridge.

Stoneback modified by Suzuki et al. does not disclose that the second desiccant material has a higher affinity for water than the desiccant material within the spacing member.

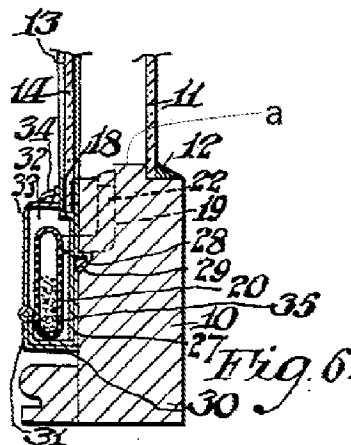
Reid, Jr. et al. discloses that desiccants with varying affinity for water have been known and used in the art (Col 1, Ln 20-21).

It would have been obvious to a person having ordinary skill in the art at the time of the Applicant's invention to have the second desiccant material in the cartridge to have a different and higher affinity for water than the desiccant material within the spacing member because Reid et al. has taught that using desiccant materials of varying affinities for water were known and within the ordinary skill in the art. Because

the cartridge is more accessible than the spacer, the desiccant in the cartridge can have a higher affinity for water because it can be easily replaced.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time of invention to use desiccants of different water affinities, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

Finally, Applicant's specification has not set forth any criticality as to why the desiccant in the cartridge should have a higher affinity for water than the desiccant in the spacer.



Stoneback '112

Response to Arguments

Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

On page 7-8, Applicant argues that the one skilled in the art would not find it obvious to combine two windows, each having either a removable desiccant system or a replaceable desiccant system. However, the newly cited prior art of Suzuki et al. employs both a permanent and replaceable desiccant systems. Thus, in light of Suzuki et al., one of ordinary skill in the art would recognize the advantages or predictability of combining two desiccant systems.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE T. CAJILIG whose telephone number is (571)272-8143. The examiner can normally be reached on Monday - Thursday from 8am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Canfield can be reached on (571) 272-6840. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. T. C./
Examiner, Art Unit 3633

/Robert J Canfield/
Supervisory Patent Examiner, Art Unit 3635